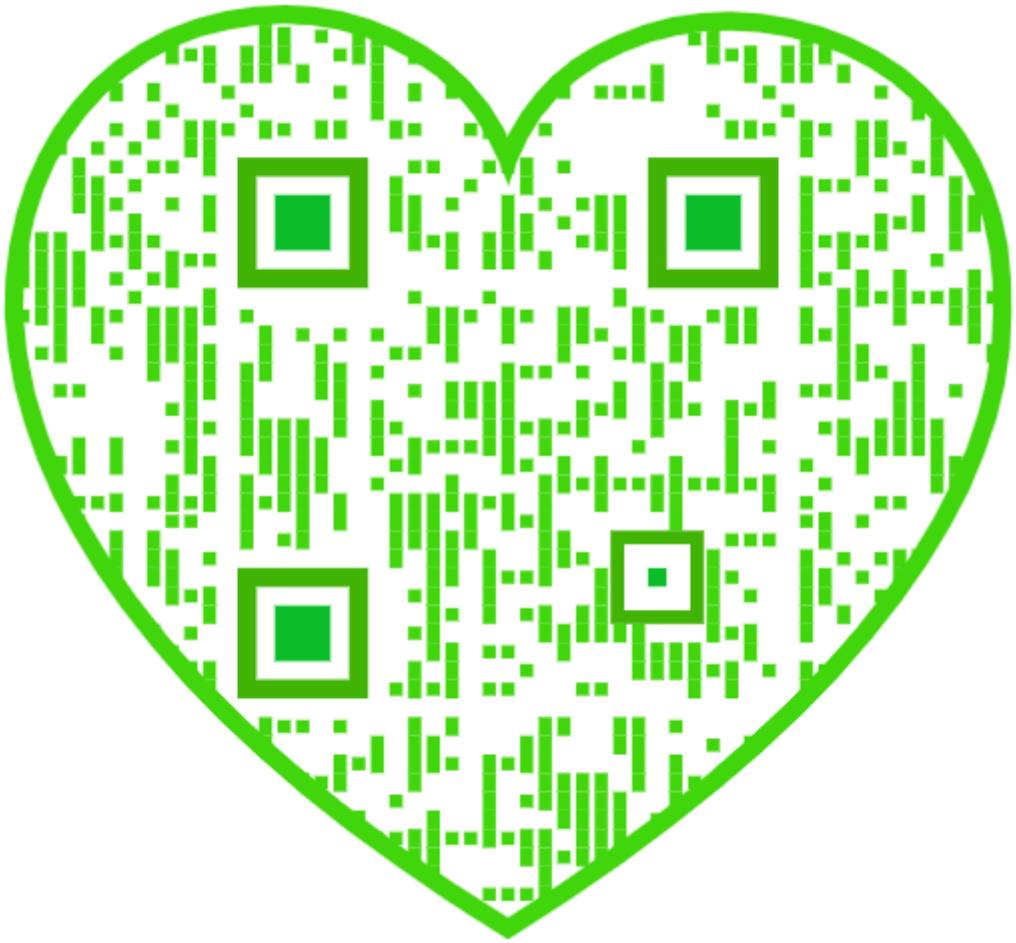

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HORSE RAISING IN COLONIAL NEW ENGLAND

DEANE PHILLIPS

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HORSE RAISING IN COLONIAL NEW ENGLAND

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DEANE PHILLIPS

With the rapid rise of the sugar industry in the West Indies during the latter half of the seventeenth century, the continental British colonies in America were called upon to serve as the main source of supplies for the sugar plantations. An important trade grew up, especially with the New England region, in which the islands received lumber, fish, foodstuffs of various sorts, cattle, and horses. In return the northern colonies obtained sugar, molasses, rum, dyestuffs, and — of especial importance to New England — specie in various forms which could be used for purchasing manufactured articles and other needed supplies from England.

Horses were used on the sugar plantations to turn the rollers of the cane-crushing mills, to haul the cane from the fields, and to transport sugar and supplies. They were in demand for saddle purposes also. As far as New England was concerned, there is ample evidence that the exportation of horses to supply this need of the sugar islands formed a very important part of the commerce which was carried on between the two groups of British colonies in the New World, and that it was equally important in the trade which grew up between New England and the French West Indies when these islands also began the cultivation of sugar. The observations of contemporary writers, the reports of the various colonial governors to the Board of Trade in London, port records and various commercial statistics of the period which have been made available by modern research, and many other scattered sources of information, indicate that this was the case.

It is apparent that the development of such an export trade in horses must have stimulated a corresponding development of horse raising on a commercial scale. In this memoir an attempt has been made to gather together such widely scattered data as are available concerning this early agricultural enterprise of New England, and to trace its development and extent during the colonial period. Since, from its nature, this raising of horses was intimately bound up with the sugar

trade of the West Indies, it has seemed advisable to give some attention also to the growth and development of the latter industry.

SOURCE AND EARLY DEVELOPMENT OF NEW ENGLAND HORSES

It is not at all certain that to the early colonists New England appeared as stern and inhospitable a shore as we are sometimes led to believe. Hardships there were in plenty, and much real privation and want, but, on the other hand, the country gave to them bountifully in many ways of its own. Not the least of its advantages in the eyes of the first settlers was the comparative abundance of pasture and grasses suitable for hay, which assured an easy support for livestock in numbers sufficient for the colonists' needs.

This feature of the country is frequently mentioned in letters written to friends in England by the early settlers and in the accounts of travelers. Thus the Reverend Mr. Higginson (1),[1] writing in 1629, describes the abundance of grass "which groweth everywhere, both verie thicke, verie longe, and verie high in divers places"; and in regard to livestock he records further, "it do prosper and like well this countrie." Another writer (2), possibly too ardent in his admiration for the new land, compares the abundance of pasturage to "Hungaria." Josselyn (3), in his visits to New England, also seems to have been impressed with its possibilities along this line, and writes in 1675 of the "broad vallies supplied with ample forage as well as that to be found in clearings in the forests."

The native grasses which furnished this forage were mainly of two sorts — foul-meadow grass and herd-grass, or timothy (4). English grasses were introduced at an early date and were found to grow well in the new land (5). Both the native grasses made good hay, and this fact rendered it possible to keep livestock with little difficulty in spite of the rigors of the New England winters. The colonists were thus enabled to increase freely the number of their cattle and horses in proportion as they found them useful. As is shown later, they did not fail to avail themselves of this opportunity, and the increase that took place was a rapid one.

[1] Numbers in parenthesis refer to the list of citations beginning on page 930. The sources cited are given in full in the list beginning on page 936.

USEFULNESS OF HORSES TO THE COLONISTS

Cattle and horses were of service to the colonists in many ways. The neat cattle furnished them food, hides for leather, and oxen for draft purposes. Sheep were valued chiefly for wool. Horses served to some extent for draft, but for ploughing and other heavy work they were found less serviceable than oxen. Their most important use was to furnish means of rapid transportation from place to place. In the earliest days of the settlements most of this travel was on foot or in small boats (6), but by 1652 a New England writer (7) could boast of the "wild and uncouth woods filled with frequented ways and rivers overlaid with bridges passable for both horse and foot." This indicates in a general way the transition that soon took place, so that horses became of steadily increasing importance as the settlement of the country proceeded and the towns became more numerous and widely separated.

In the difficulties with the Indians, horses were of especial advantage to the colonists. Not only was this true in the case of offensive operations against the savages, but in the frontier troubles which were always imminent the possession of horses enabled the settlers to bring aid quickly to one another when attacked and thus saved many an isolated settlement from extinction. That the colonists realized this advantage is apparent from the pains which they took to prevent any horses from coming into the hands of the natives. In Plymouth (8), in Massachusetts Bay (9), and in Connecticut (10), laws were passed to prevent the selling of any horses to the natives, and even as late as 1665 it was only after considerable debate that the Plymouth court allowed one such sale to be made to a friendly Indian for purposes of "husbandry" (11).

Lastly, it is interesting to note that horse racing was not unknown even in the early days of the Puritan settlement in the Massachusetts Bay colony, where the court vents its dire condemnation on "certain euill and disordered persons" who engaged in such a breach of public decorum (12). At a later date, however, such racing came to be a recognized sport in Boston (13), and especially in Rhode Island, where races were very common and often for high stakes (14). These practices were not frequent in the early days, however, and came to be

tolerated only after the country was well settled and customs had changed considerably.

EARLY IMPORTATIONS

The first colonists who settled at Plymouth in 1620 brought neither horses nor cattle with them to the new land, and it was not until four years later that the first neat was brought over (15). In the same year the correspondence of Governor Bradford indicates that " a bull and 3 or 4 jades " were to be shipped to him from London to be sold in the colony (16). The first record of the actual presence of a horse in Plymouth seems to be in 1632. Governor John Winthrop, of the Massachusetts Bay colony, describes in his diary a journey made to Plymouth in that year, partly by boat and partly on foot, and states that on his return he was sent a part of the way on " the Governor's mare " as a mark of special respect (17).

However, from some source — probably England, but possibly Holland, with whose ships the colonists had traded (18) — the Plymouth settlers had by 1632 obtained a considerable supply of cattle, for it is stated by Governor Bradford that by this date many persons had been enriched by selling corn and cattle at high prices to newcomers in both Plymouth and Massachusetts Bay and had " spread out on farmes " for the purpose of raising more (19). As to the number of horses in Plymouth at that time, however, no information can be gleaned from Bradford's narrative, for he, in common with other writers of the period, uses the term *cattle* more or less indiscriminately to cover any sort of livestock, including horses.

The richer Massachusetts Bay colony seems to have been better supplied than the colony at Plymouth. The fleet that arrived with its numerous settlers in the year 1629 brought over also a considerable number of horses and cattle, one hundred and fifteen head in all (20), among which were thirteen horses (21). In the following year the ships that brought over Governor Winthrop and the second group of colonists had on board two hundred and forty cows and about sixty horses, as is learned from Winthrop's letters (22). Some of these animals died while *en route* and it is not certain just how many were added to the stock of the colony, but among the horses that survived there were both mares and stallions (23).

After the arrival of these early settlers, the succeeding decade saw the landing of a steady stream of new colonists about the bay. It is reasonable to suppose that they also brought many horses, but specific references to such importations are not frequent. Sir Ferdinand Gorges in 1632 wrote from England to Captain John Mason in Massachusetts promising to send over several at the first opportunity (24), but no mention is made of their arrival. Winthrop also records a few importations, but in a casual and incidental fashion which implies that his register makes no attempt at completeness in this respect. Of those noted by Winthrop, the first is in 1633, when he mentions the arrival of the ship *Bird* with four mares on board (25), and in the same year the *Bonaventure* with two, four having been lost in transit (26). In 1635 Winthrop speaks also of the arrival of a Dutch vessel with " 27 Flanders mares ..... and 3 horses " (27). This last-named ship had cleared at the Texel five weeks previously, and had thus made an unusually quick voyage and one notable for the fact that none of her cargo of livestock had been lost *en route*.

During these early years, also, both Winthrop and Bradford record in their journals the frequent arrival in the bay of ships having cattle on board, and it is probable, for reasons already given, that these " cattle " often included some horses. The number of such arrivals was certainly large. Winthrop, for example, notes that in 1634, " during the week the court was in session there came in six ships with store of passengers and cattle " (28). In the same year there were fourteen ships in one month which cast anchor either in Salem or in Boston (29). Many more arrivals probably went entirely unrecorded, and therefore the scantiness of the record does not necessarily mean that horses were not being brought into the country in considerable quantities. That they were being imported in large numbers is, in fact, the only possible conclusion to be drawn in view of their great abundance a few years later — to confirm which there is plenty of evidence, as will be shown presently.

SOURCES OF NEW ENGLAND HORSES

Since the early importations undoubtedly furnished the basic stock from which two noted American breeds — the Narragansett pacers and the still more famous Morgans — were later developed, it is worth while

to consider briefly the sources and the general characteristics of these first imported horses.

In view of the lack of any direct evidence to the contrary, it is fair to assume that the first shipments were mainly from England and of the small nondescript type which at that time made up the bulk of the English horses (30). There was, however, some admixture of other blood. In the primary importation into the Massachusetts Bay colony in 1629, three at least are mentioned specifically as " having come out of Leicestershire " (31), which at that time was the source of a more or less distinct type of horse of a sort better than the average (32). The importation of Flemish mares also has been noted. Wallace contends that these latter were not Flemish but were rather of a Dutch type (33), but his conclusion is based merely on the fact that the vessel cleared from a Dutch port — which does not seem a very valid reason for controverting Winthrop's specific statement as to their Flemish origin, especially since Flemish horses were well known at that period as a distinct type.

There is one other possible source of some of the New England horses which deserves consideration, especially because it may tend to explain in some measure the persistently small size of these horses, even when carefully bred — as later they were in Rhode Island and Connecticut — and, further, the constant occurrence among them of individuals possessed of a natural pacing gait. This possible progenitor is to be found in the Irish hobbies, a race of small, hardy, wild ponies existing in Ireland during the first part of the seventeenth century. These horses were in great demand in England for saddle purposes, and were exported thence in such quantities that they are said to have become practically extinct in Ireland before the year 1634 (34). They were well known in England, and their natural pacing gait made them especially desirable in any place where travel was of necessity on horseback (35) ; it is not at all improbable, therefore, that some of them found their way to New England, where they would have been especially serviceable. There seems to be no direct evidence to this effect, but any comparison of such fragmentary descriptions of the two as are available discloses a rather striking similarity between these Irish hobbies and

the famous Narragansett pacers which were later developed in Rhode Island.[2]

FREE RANGE AND ITS EFFECTS

From the very earliest period of New England history it was customary to allow both horses and cattle to run at large on the public commons. At times some provision for a herdsman was made, but as the herds increased in numbers and the settlements became more scattered the animals began to roam more or less at will about the settled areas and often strayed away for considerable distances into the forest or were lost completely. Winthrop records a happening of this sort in a letter written to Governor Endicott on behalf of a widow whose horse had been impressed for military service. Pleading her need for the one that had been taken from her, he says, " She hath another horse but has not seen him for several months " (36). Strays of this sort were numerous and this often led to many difficulties of ownership, which in time compelled definite legislative provisions to be made.

Where horse raising developed, as it did later, on the islands of Long Island Sound and on the water-guarded points and necks of Rhode Island, this free range was not a serious problem. But where the horses and cattle were running loose about the towns in a semi-wild state and in ever-increasing numbers, many difficulties were bound to arise. The chief trouble came from damage done to gardens and crops by herds of these equine and bovine marauders. At first " all greate cattle " were herded by day by a public herdsman, and the owners were held responsible for any harm inflicted by their animals after nightfall (37). But soon the burden was put on the other side, and in Massachusetts Bay, for example, in 1642 the court repealed the former act and provided that " every man must now secure his own corn and meadow against damage " (38). It was provided further that only in case animals running at large had broken through an admittedly strong fence could the person suffering the damage have any redress. Complaints for damages of this sort appear continually in the court records of all the colonies, and it was apparently a cause of endless litigation, which persisted until a late date.

[2] A more detailed discussion of the origin of the Narragansett pacers is given on page 922.

Another difficulty met with as a result of open-range conditions was that of deterioration of the breed. Whatever may have been the source of the New England horses, it is clear that the promiscuous breeding of the semi-wild animals on the commons could not be conducive to the perpetuation of their best characteristics, although it may have resulted in a certain hardiness by weeding out the ones unable to stand the rigors of this wild life. At any rate, efforts were made before long to prevent the breeding of the obviously unfit. In 1668 the court in Massachusetts Bay declared: "Whereas, the breed of horses is utterly spoyled whereby that useful creature will become a burden..... be it enacted that no stone horse above two years old be allowed on the commons or at liberty unless he be of comely proportions and fourteen hands in stature" (39). The owner of a horse found in violation of this statute was to be fined, and later the amount of the fine was raised. Plymouth (40) and Connecticut (41) passed similar limitations, the minimum stature in the latter case being set at thirteen hands. These restrictions seem to have been fairly well enforced but could obviously result in little improvement of the breed as long as complete open-range conditions prevailed.

One of the perplexities in all these cases of damages, after horses and cattle had become numerous, was for the person whose premises had been invaded to recognize whose animal it was that had done the damage. The same difficulty was met with in fixing the fines for undersized stallions found running at large. Often these horses and cattle were even strays from a neighboring town, which made the problem still more complicated. This led to the passage of acts compelling the branding of all animals with both the mark of the private owner and that of the town of his residence. The general court in Massachusetts Bay passed such an act in 1647, and in its records are enumerated the marks of thirty-three different towns under its jurisdiction at the time (42). In 1656 the New Haven colony compelled horses to be branded (43), and the other Connecticut towns did the same in 1665 (44). Rhode Island had a similar provision (45). In the latter plantation in 1686, thirty wild and unmarked horses were ordered caught and sold and the proceeds employed to build a prison and stocks (46). This was the usual fate of unbranded animals or persistent strays. In 1661 the court at Plymouth, "on complaint of some that certain horses or horse-

kind belonging to Rhode Island are found goeing within our libertys.... to the great annoyance of Indians and English," ordered that such animals should be treated as common strays and sold (47).

INCREASE IN NUMBER OF HORSES

In the two or three decades following the first importations there was a rapid increase in the number of horses in New England, and they became abundant not only in the region about Massachusetts Bay but also in the newer settlements in Connecticut and Rhode Island. As the colonists pushed into these latter areas they took horses and cattle with them from the earlier settlements, and, finding the new regions in some places especially suitable for the raising of livestock, they began to engage in it on a considerable scale, so that by 1650 or soon afterward there had come about an abundance of both horses and cattle through the whole New England territory.

The increase which thus took place is brought out clearly by the course of prices during the period. In the years of the great immigration that followed the first settlements on Massachusetts Bay, these prices were rather high. Winthrop, in 1633, rates mares as being worth £35, and cows from £20 to £26 (48). Two years later the Flanders mares, the importation of which has already been noted, sold for £34, and heifers brought in by the same ship sold for £12 each (49). During the next few years the great number of settlers arriving caused prices to rise even higher, and, as Bradford records, "ye anciente planters which had any stock begane to grow in their estats and spread out on farmes to raise more" (50).

By 1640, however, the supply had apparently overtaken the demand and prices began to fall (51). By 1645 this decrease had gone so far that Winthrop speaks of a horse the price of which he gives as £10 as a "costlie horse" (52). In 1653, however, horses were still rated by the Massachusetts Bay court at £16 (53), but thirteen years later, in Connecticut, they had fallen to half that amount (54), and in 1668 the Massachusetts Bay court reduced the rate from £10 to £5 (55). Finally, in 1677, the rate was still further reduced in Massachusetts Bay, and horses were ordered to be received at a rate of £3 for each horse or mare above three years old and 40 shillings for two-year-olds (56). In

the last-named case the court stated specifically as its reason for the reduction that horses had for some time been worth much less than the amount previously fixed by law. During this period of falling prices, the number of persons in the country had steadily increased, roads were being established, and new agricultural lands had been opened up — all of which would result in an increased demand for horses. It appears, therefore, that the increase in their numbers must have more than kept pace with the development of the country, and that the decrease in prices was due to the abundance of the supply rather than to any decreased need for their services.

There is much other evidence to indicate that by the middle of the seventeenth century horses had become very abundant. In 1647 those running wild in Massachusetts Bay were so numerous and were doing so much damage as to call for legislative interference (57), while Maverick, writing a little more than ten years later, says, " it is a wonder to see the great herds of cattle ..... and the great number of horses besides the many sent to Barbadoes and the other Carribee islands " (58). The same condition is attested by John Winthrop the younger, writing from Connecticut in 1660 (59), and by the report of the Commissioners to New England presented to the Board of Trade in London in 1665 (60). By 1675, according to William Harris, who had been sent out by the Board of Trade, the country had so many horses " that men know not what to do with them " (61).

A still further indication of the plentiful supply of horses in New England is the fact that by this time these colonies had begun as a source of supply for other colonies. In 1642 Massachusetts Bay was being called upon to furnish a shipment of horses to Lord Baltimore's colony in Maryland (62), and in the report to the Board of Trade in 1665, already mentioned, horses are named as one of the exports of Massachusetts to Barbados and Virginia. A letter written in 1650 by Secretary von Tienhoven, of the Dutch West India Company, indicates that at that date horses were being obtained from New England by the Dutch on the Hudson River (63). The letter in question advises prospective settlers in the New Netherlands to take no horses with them to the new land, because " they can be got at reasonable expense from the English who have plenty of them." There is appended also a

table of prices in "New England" for horses, cows, and hogs; so there can be no doubt as to which of the English settlements Von Tienhoven had in mind.

It is thus apparent that by about the middle of the century or a little later, New England had come to have an abundance of horses more than sufficient for its own needs. Natural increase under free-range conditions would account for such large numbers only if it were assumed that the importations during the early years of settlement were far more numerous than have been recorded, or else that such importations continued throughout the whole period — which does not seem very probable. During the latter part of the years described, however, the exportation of horses, which was just beginning, had as a result the stimulation of horse breeding for this purpose in a more careful manner, and probably accelerated to some extent the rate of increase.

With the development of this export trade begins the second phase of horse raising in New England, resulting in many changes throughout the area and in the establishment of horse breeding as an important and extensive industry in certain favorably located sections.

THE BEGINNING OF THE EXPORT TRADE IN HORSES

As has already been indicated, some horses were exported from New England to the other continental colonies at an early date. Such shipments, however, never came to be of any great importance, and are worthy of mention chiefly to show the relative abundance of horses in New England as compared with their numbers in the neighboring colonies. The main demand that resulted in the exportation of New England horses came from the sugar plantations in the West Indies, where both horses and cattle were needed for draft purposes, to haul the cane from the fields, to transport sugar and supplies, and to turn the heavy cylinders in the cane-crushing mills.[3] Horses were used for

[3] Oldmixon (*The British Empire in America*, vol. 2, p. 147) gives the following description of the operation of these cane-crushing mills: "They grind the canes thus in the cattle mills; The Horses and Cattle being put to the tackle, go about, and turn by sweeps the middle Roller; which being cogged to turn others at the upper end, turn them about. They all three turn upon the same centers which are of Brass and Steel, going so easily of themselves, that a Man, taking hold of one of the Sweeps with his Hand, may turn all the rollers about; but when the canes are put between the rollers it is a good Draught for five Oxen or Horses."

saddle purposes also by the sugar planters, who were willing to pay high prices for superior animals of this type.

That the New England colonies, rather than any of the other continental settlements, should have become the accepted source of supply for this demand from the sugar islands, resulted chiefly from the fact that they were the only ones which possessed a surplus of horses at the time when the demand first began to make itself felt, about the middle of the seventeenth century. In most of the other colonies there was an actual scarcity of horses, as in Virginia (64). The Dutch in New Netherlands, it is true, did actually export some horses during the year 1650, but an act was soon passed which forbade such shipments (65). It thus came about that in the early days of the sugar industry in the West Indies, New England had no real competitor among the continental colonies in supplying the growing demand for horses for the sugar plantations. Virginia furnished many cattle (66), and after 1700 the colony on the Hudson River, by that time in English hands, again began the shipment of horses; but New England's leadership in the trade was never seriously threatened during the colonial period.

The continental American colonies proved to be a convenient source of supply to the sugar islands of the West Indies, not only for horses and cattle but for many other commodities as well. The trade in horses, in short, was an integral part of the much more extensive commerce which grew up between the West Indies and the northern British colonies whereby the islands were supplied with timber, boards, staves, fish, and provisions of all sorts, in return for sugar, molasses, rum, dyestuffs, and, most desirable of all, Spanish dollars and bills of exchange on London. The extent of the export trade in horses at any particular period, therefore, was influenced by the condition of this commerce as a whole and by the changes that took place in the sugar industry itself. Wars, acts of Parliament, competition between the Islands — in short, all factors that aided, hindered, or changed the direction of this larger trade — had their effect on the exportation of horses. Certain changes in the manufacture of sugar which took place during the first part of the eighteenth century also tended to decrease the demand for horses. Since, therefore, the horse raising that developed in New England during the later part of the colonial period was essentially dependent on

this export trade, it is necessary in any further treatment of the subject to consider in some detail the rise and development of the sugar industry itself.

RISE OF THE SUGAR INDUSTRY IN THE BRITISH WEST INDIES

At the beginning of the seventeenth century, Europe was being supplied with sugar mainly by the Portuguese, from Madeira and, more especially, from their settlements on the mainland of South America, in Brazil. The English also had probably produced some sugar in South America, from Surinam, before ceding that colony to the Dutch by the treaty of Breda (67), but it was not until they had established a settlement in Barbados, one of the Windward Islands, that they began to be serious competitors of the Portuguese.

The colony in Barbados had been settled for some time before 1630, but for a considerable period it had produced only indigo, ginger, cotton, and "bad tobacco," which brought in but moderate returns. Sugar culture was introduced in or about the year 1642, and by 1650 the planters had grown proficient in its production and were shipping it to England in considerable quantities (68). The new industry met with remarkable success and within a few years the island had become very prosperous; lands had increased greatly in value, and the planters had amassed great wealth and were found living on a scale of surprising pomp and luxury. In 1661 King Charles II created thirteen baronets from among these planters, none of whom are said to have had an annual income of less than £1000 and some of whom had more than £10,000 a year. In the same year the trade of the island is estimated to have supported more than four hundred ships and the value of the exports is placed as high as £300,000 (69).

The great success of Barbados stimulated the growing of sugar on the other islands of the British West Indies. St. Christopher (which the English shared with the French), Nevis, Montserrat, Antigua, and lastly, after its capture from the Spanish in 1655, Jamaica, all came into the market with sugars and the trade grew at a rapid rate. The Navigation Acts, confining this commerce to British bottoms, soon made London the chief sugar mart of the world, whence the product was re-exported by British merchants. English sugars undersold those of

the Portuguese, and by 1670 the latter had been forced out of practically all the markets north of Cape Finisterre (70).

EARLY EXPORTATION OF NEW ENGLAND HORSES

The rapid development of the British sugar islands called for great quantities of supplies to carry on the work of the plantations, and, since the islands had few resources of their own, importations were necessary. Provisions from Ireland, slaves from Africa, shoes and other manufactured goods from Europe, as well as the products of the continental British colonies — the nature of which has already been indicated — all were brought into the islands, and of these supplies horses were a not unimportant item.

In the earliest days of the sugar industry, trade was still free and the Dutch and the Portuguese seem to have furnished the British islands with as many horses as were needed (71). With the stoppage of this trade by law and the increasing development of the plantations, however, recourse was had to England and to New England to supply the demand. During the period between 1649 and 1658 the importations of English horses were especially numerous. In those years there are recorded in the British Colonial Papers forty-eight different permits for such shipments, for a total of more than nineteen hundred horses (72). England continued to send horses until as late as 1667 (73), but the levying in 1654 of an export duty of 20 shillings a head (74) cut down the numbers considerably and hastened the shift in the trade by which New England at length became almost the sole source of supply for the islands. In that region there was no export duty except in Massachusetts Bay, where it was only sixpence, and the cost of transportation was much less because of the shorter distance, which resulted also in much smaller losses in transit.

The trade of Massachusetts Bay with the West Indies had already been established before the production of sugar in the British islands had come to be of importance, and so it is only natural that with the rise of the latter industry and the demand for horses the growing surplus of New England animals should receive the advantage of the outlet thus opened. As a result, horses were being shipped from Massachusetts ports fully as early as from those of England, and, for

the reasons given, the numbers exported soon exceeded those from the English ports. Concerning the beginning of this trade Winthrop writes in 1647: "It pleased the Lord to open to us a trade with Barbados and the other islands . . . which as it proved gainful, so the commodities which we had in exchange for our cattle and provisions, as sugar, cotton, tobacco, and indico were a good help to discharge our engagements with England" (75).

As to whether there were any horses among these "cattle" which Winthrop states were being sent to the West Indies, there is no evidence. The record of such exports is, in fact, much like that of the early imports into the country, and specific mention of such shipments is not frequent, even though more general statements, such as those to be found in the reports to the Board of Trade in London, indicate that they were taking place. In 1648 Winthrop notes in his journal the presence of a ship "lying before Charlestown with eighty horses on board bound for Barbadoes" (76), and this is probably the first recorded exportation of horses from New England to the West Indies. Wallace states (77) that there was a shipment of eighty head in 1640, but he does not give the source of his information and it is more than probable that it is this exportation of 1648 to which he refers, inasmuch as the demand for horses had hardly begun in Barbados as early as 1640.

The exportation of horses from New England in 1648 or before was evidently not limited to this one cargo, however, for a writer who styles himself Beauchamp Plantagenet, describing a visit to Barbados in that year, states that "New England sendeth horses and Virginia oxen" to turn the sugar mills in the island (78). In 1649 the Massachusetts Bay court passed an act forbidding the exportation of mares and placing a tax of sixpence on every gelding sent out of the country (79). This was obviously an effort in the main to protect the breeding stock of the area, and Massachusetts Bay urged that similar prohibitions be adopted by all the United Colonies of New England. The colony at New Haven was the only one to act on the recommendation (80), and in Plymouth and Rhode Island there continued to be no restriction on such shipments. That such a law was found desirable in Massachusetts was due partly to military considerations, but the fact serves also as

an interesting side light on the extent of the demand for horses, for it is clear that at that time there was no great scarcity of them in the region.

The trade between Massachusetts Bay and Barbados was more or less interrupted during the period of the Commonwealth in England, as a result of the refusal of Barbados to submit to the new authority; but, in general, the exportation of horses from the colony continued on a considerable scale, and there is much evidence of the growing dependence of the islands on the New England region as a source of supply. The report of the Commissioners for New England to the Board of Trade in London in 1665 states that Massachusetts exported fish, pork, beef, horses, and corn to Virginia and Barbados (81). Inasmuch as horses are not mentioned as a product of any of the other colonies, in the report, it may be inferred that the region about Massachusetts Bay was still the chief source of supply among the continental colonies. In 1673 Captain Gorges was instructed by the Assembly of Barbados to insist to the English Parliament on the dependence of the island on New England for "boards, timber, pipe staves, and horses," to the end that no acts might be passed which would interfere with the trade (82). And in 1675 a certain "Mr. Harris of New England" gave an account of the trade of the country, in which he says that "to Barbadoes in exchange for horses, beef, pork, butter, cheese, flour, peas, biscuit, we have sugar and indigo" (83).

In 1700 Massachusetts Bay was still sending large numbers of horses to Barbados, and also to the Leeward Islands and to Jamaica. Toward the end of the century, however, many of the horses shipped were animals that had been raised farther inland and had been driven considerable distances to be sent out from the ports on Massachusetts Bay (84). This is shown, for example, by the correspondence of Waite Winthrop with his brother Fitz-John, of Connecticut, by which it appears that the latter was sending horses overland to Boston from his plantation on Fisher's Island, in Long Island Sound (85). There was thus taking place a shift in the raising of horses in New England, by which other regions than that about Massachusetts Bay were coming to be of increasing importance, especially as regarded the export trade.

As the settlement of New England proceeded, it was very soon dis-

covered that there were certain areas in Rhode Island and in Connecticut which were much better adapted to the raising of livestock of all kinds than the region first settled (86). These more favored areas were found mainly in the upper valley of the Connecticut River, along the shore of Long Island Sound, and about Narragansett Bay in Rhode Island. Here plenty of level, well-watered pasture lands were found, swamp grasses which made good hay were abundant, and in many places the grazing areas were intersected with salt-water ponds and lagoons which served to separate pasture land from cornfields far more effectively than any fence could have done. The damages and endless difficulties resulting from free range in other less favored sections made this last-named feature one of no mean advantage in the raising of livestock and in the improvement of the breed. The few cattle, sheep, and horses which the first settlers in these regions brought with them were soon augmented by others, and before long the obvious agricultural advantages of the new areas were being used to their full extent.

With the coming of the demand for shipment to the West Indies, horses and cattle were soon being raised for export in these more favored districts. Some horses were apparently being shipped from Newport as early as 1656, but there is some question as to whether this particular shipment did not consist of horses stolen from Massachusetts instead of animals raised on Narragansett Bay (87). In 1677, however, Captain John Hull wrote to one of his partners in the Pettiquamscut Purchase in Rhode Island, proposing to build a stone wall across Point Judith Neck, "so that no mongrel breed might come among them," and to raise a breed of "large and fair horses and mares" for shipment to the West Indies (88). This plan appears to have been put in operation, for not long afterward Hull wrote to a resident of the district, a certain William Hefferman, accusing him of stealing horses and rather tartly offering to give him some horses that he might have no further need to indulge in such practices (89). By 1680 horses were being shipped from Rhode Island in sufficient quantities to be mentioned by Governor Sanford in his reply to the inquiries sent out by the Lords of Trade and Plantations, in which he states that "the princi-

pal matters which are exported among us is horses and provisions" (90).

In Connecticut, also, horses soon came to be a recognized commodity of trade. From the towns on the upper Connecticut River, as late as 1680 many horses were being driven overland to Boston to be sold, presumably for the export trade (91). The coast region of Connecticut had before this time begun a direct trade with the West Indies. In 1667 it is recorded that a vessel had been sent out from New London bound for the island of Nevis, from which twenty-six horses were lost overboard in a storm (92). Such other evidence as is available indicates that this was not an isolated shipment from New London. This port was, in fact, so situated as to draw not only on a fairly well-adapted livestock area in Connecticut, but also on the most important part of the Rhode Island area, and with the development that continued to take place it in time became the chief center for the exportation of horses from New England. In the period before 1700, however, New London had but made a beginning in this trade, and this was also the condition of Newport, Providence, and the river towns of Connecticut.

HORSE STEALING

One further development took place during the period just described, which casts an interesting side light on the extent of the export trade in horses and its effect on the New England region. This was the growing prevalence of horse stealing throughout all the colonies. One of the objects of the branding of horses and cattle, already described, was to prevent this practice. The brander in most of the towns was a dignitary of no small importance, and as a rule was required not only to brand each animal but also to keep a record of the operation in an official book together with a description of all the natural and artificial marks on the animal and the name and residence of the owner. In Rhode Island (93) and in Connecticut (94) there were fixed severe penalties for any person who took or attempted to take out of the town any horses or cattle without first informing the official brander and receiving his permission.

Branding alone, however, did not provide a very effective check on the stealing of horses and cattle. As the exportations grew in volume and more and more ports were engaged in the trade, it became increas-

ingly easy to conceal such thefts and the practice became surprisingly prevalent. Miss Caulkins, in her *History of New London* (95), has described as follows the conditions during this period:

> As the West India trade increased from year to year the raising of horses became very profitable and many farmers entered into it largely. Lands being uninclosed it was easy to run such horses off to a port where the mark of the owner was not known, or the mark itself could be altered. A bold rover in the woods might entrap half a dozen horses with ease and, shooting them off through Indian paths by night, reach some port in a neighboring colony; and before the owner could get track of them they were far off upon the ocean, out of reach of proof. Many persons otherwise respectable entered into this practice or connived at it. Men who would scorn to pocket sixpence that belonged to another seemed to think it no crime to throw a noose over the head of a horse running loose and to nullify the signet of the owner or engraft on it the mark that designated their own property.

Professional buyers, called "horse coursers" in the parlance of the time, went about the country gathering up horses into pounds for sale or driving them to ports whence they were shipped, and very few of these persons escaped the suspicion of having at one time or another enlarged a drove by gathering into it some to which they had no legal claim. Persons of considerable prominence also were implicated, as Miss Caulkins indicates; William Coddington, at one time governor of Rhode Island, seems to have been one of these (96).

Such delinquency increased greatly in the latter half of the century and the disclosures become more and more frequent. In 1668, as a preventive measure, the Massachusetts Bay general court ordered a toll book to be kept in every town, in which was to be entered a description of each horse, and a voucher was to be given to the owner to prove his property (97). It was necessary to present this voucher in case of any subsequent sale. As has been noted, both Rhode Island and Connecticut had passed laws forbidding the taking of horses beyond their jurisdiction unless first recorded by the town recorder. In 1684 court was held at Stonington for the trial of horse coursers. Two persons were convicted and sentenced to pay fines of £10 and to receive fifteen lashes (98). The court calls the offense "a crying evil" against which all well-disposed persons were bound to give aid. In 1700 a special court was held at New London for the sole purpose of trying horse thieves, and the penalties for such thieving were made more severe (99). Finally, in 1701 a toll book was ordered to be kept in

every seaport town in Massachusetts, in which were to be entered the number, description, destination, and vessel on which it was shipped, of every horse sent out of the colony, as well as the name of the owner of the horse and his place of residence. For any violations a fine of £10 was to be inflicted for each horse sent out (100).

The incentive for most of this stealing was, of course, the export trade to the West Indies, which made the thieving both possible and profitable. The prevalence and widespread extent of this practice is but one more indication of the importance and magnitude of the export trade itself during this period. It is therefore probably no exaggeration to say that by the year 1700, horses were being raised for shipment to the West Indies throughout the whole New England area — to such an extent had the trade developed in the space of fifty years. It is apparent, however, that by this time a shift was taking place in the center of the trade, from its early location in the ports of Massachusetts Bay to those of Rhode Island and, especially, Connecticut.

These shipments of horses were carried on the decks of the vessels engaged in the West Indies trade, so that nearly every ship could transport a few animals on the southward voyage. Since the ships engaged in the trade were numerous and since they usually made two trips a year (101), the possible shipments of horses were large. By the end of the period, also, a beginning had been made in the building of vessels with more ample deck space to provide room for the livestock shipments, and these "horse jockeys," as such vessels were called (102), played an important part in the West Indies trade during the century that followed.

INCREASING DEMAND FOR NEW ENGLAND HORSES FROM 1700 TO 1775

The exportation of horses, which by 1700 had become a well-established part of the trade of New England with the British sugar colonies, continued on an increasing scale during the century that followed. About 1700, however, the demand for supplies for the islands began to be greatly augmented by the entrance into the market of the Dutch and French West Indies, which were beginning in their turn to develop the raising of sugar on an extensive scale. A steady increase in New England exports was a reflection of these changes that were taking

place in the sugar industry, and horses continued to be an important item in the exchanges. In the various ups and downs of the sugar trade, therefore, is to be found the explanation for corresponding changes in the raising of horses which took place in New England during the first half of the eighteenth century.

GROWTH OF THE SUGAR TRADE AND EXPANSION OF THE MARKET FOR HORSES

In 1698 a decree of the Royal Council of France allowed sugar from the French islands, which were at that time producing only small quantities, to be sent directly to any port in Europe. This proved a great stimulus to the development of the French colonies, and after the Peace of Utrecht the growth of these was rapid (103). Martinique, Guadeloupe, Dominica, and Santo Domingo — the French colony on the island of Hispaniola, or Haiti — all came into the market with sugars. Prices fell off sharply as a result of the increased production (104), and the British islands — partly, at least, because of the law compelling them to send their sugar first to England, from whence it was re-exported[4] — found it difficult to compete with the French, who were soon in a fair way to oust the British from their leadership in the trade (105).

The continental British colonies were not slow in taking advantage of the new outlet for their products which was thus opened up, especially as the trade with the French proved to be very profitable. The French home market was closed to the importation of rum — which, distilled from molasses, was an important by-product of the manufacture of sugar — and as a result the French planters were willing to sell their molasses much more cheaply than were the British. This molasses was eagerly taken by the New England traders in exchange for the usual plantation supplies, and was brought back to New England, distilled into rum, and used to advantage in exchanging for furs and in the African slave trade.

Most of the trade with the French islands was carried on by direct voyages to their ports, and some supplies were furnished in this way

[4] According to Ashley (*The British Colonies in America*, vol. 1, app. 1, p. 75) the re-exports from England during the period under discussion were as follows: 1713–1715, 18,000 hogsheads a year; 1715–1719, 17,000 hogsheads a year; 1733–1736, 2300 hogsheads a year; 1737–1739, not more than 450 hogsheads a year.

to the Dutch, who were increasing their sugar production in Surinam. There grew up in addition a very considerable indirect trade by way of the barren Dutch island of Curaçao, where the Dutch had established a free port. This port soon became a great entrepôt for all the West Indies. Here were landed the supplies brought by the New England vessels, which returned home laden with sugar, molasses, and the other products of the islands, while the lumber, horses, provisions, and other supplies brought by them were either transferred directly to island vessels or put ashore and peddled out among the islands by the Dutch at their leisure (106).

During this time New England horses continued to be sent, as formerly, to the British islands along with the other customary supplies, but there is much evidence that they were equally important in the trade with the Dutch and the French. At Curaçao they were received in considerable quantities and many were put ashore on the neighboring islands of Boneiray (or Bonaire) and Aruba (107). Here they were kept until there was a call for them in the trade carried on at Curaçao. At Surinam no vessel was allowed to trade unless it brought in horses as part of its cargo (108), and the various reports to the Lords of Trade made by the governors of the continental British colonies indicate that this Dutch colony was a frequent destination for the horses sent out from their ports (109). Another and more confidential report made to the Lords of Trade in 1721 "On the State of the British Plantations in America" states that "the trade of Massachusetts Bay consists chiefly in the export of horses to Surinam and to Martinico and other French islands, which is a great discouragement to the planters in the British islands for without these horses French and Dutch could not carry on their sugar trade" (110). In 1743, Ashley, writing on the condition of the British colonies, also notes horses as one of the important items with which the French and the Dutch are supplied by the continental colonies (111), and his statement is confirmed by that of other contemporary writers and, especially, by reports of the various British governors to the Board of Trade in London.

There are many other indications that this trade in horses between New England and the Dutch and French islands was extensive. Gov-

ernor Robert Lowther, of Barbados, writing to the Board of Trade as early as 1715, states: "It would be of great advantage to this place, and to all his Majesty's Sugar Colonies, if there was made a law in England to Restrain His Subjects in North America from exporting Horses into any country not under his Majesty's Dominion, for the French at Martinique and Guadelupe and the Dutch at Soronam begin to rival us in the sugar trade and this is owing to the great Supplies of Horses they receive from New England" (112). Other British governors and numerous sugar planters continued to write to the Board of Trade in a similar vein, protesting especially against the trade between the northern colonies and the French, which they claimed was in violation of the treaty of neutrality made in 1686 between Great Britain and France.

The matter came to a climax in 1731, when the British planters presented a petition to Parliament with a draft of a bill which would specifically forbid the continental colonies to sell "horses, lumber, and provisions" to any but British subjects (113). Hearings were held on this bill and much evidence was brought out to indicate that the trade in horses was a very important part of this commerce. The testimony of a certain William Fraser is a fair sample of the large amount of evidence in this connection. In 1729 he claimed to have seen about thirty New England vessels at Martinique and St. Lucia trading horses for molasses, and he stated further that the New Englanders told him that if they brought in sixty horses alive they paid nothing for their permission to trade.

The continental colonies vigorously defended their right to trade with the French and the Dutch, and the bill finally failed to pass.[5] A long and acrimonious discussion ensued, finally resulting in the passage of the so-called "Molasses Act,"[6] which, by putting a prohibitive duty on the importation of foreign sugar, molasses, and sirups, aimed to put an end to the questioned trade. This act, however, because of the lack of adequate machinery for its enforcement, could not at that time be

[5] An incorrect statement to the effect that such sales of horses to foreign sugar islands were prohibited in 1731 appears in the volume on Rhode Island Commerce, Massachusetts Historical Society, Collections, 7th ser., vol. 9, no. 69, p. 14, note 2.

[6] 6th George II, Chapter 13. This act provided for a duty of sixpence a gallon on molasses and sirups, and five shillings a hundred pounds on sugar imported from any foreign American plantation into any British colony. Importations from Spanish and Portuguese sources were exempted, thus making the act in effect a hindrance only to trade with the French and the Dutch.

made effective — especially since it would have been fatal to a trade which had now become a vital necessity to the continental colonies. It was not until a considerably later time, when the restrictions were revived under Grenville's ministry, that the act really was enforced (114). The trade during the period in question therefore continued practically unchecked, and New England still succeeded in furnishing all the West Indies with horses as well as other supplies.

There is little doubt that during this time horses were a very important source of income to the New England colonies. They are invariably mentioned first among the products of Rhode Island in the reports made by the various governors to the Lords of Trade in London (115). The extent of the shipments is noted also by most of the contemporary writers of the period — "vast quantities of lumber and horses sent out by the New Englanders" (116), as one writer has described it. Some idea of the importance of the trade may be gained also from the complaints of the British planters, already mentioned, because of the supply furnished to their competitors, the French (117). The reports of the governors of New York during this period indicate that this colony also was exporting some horses at this time (118), but not in sufficient quantities to threaten the leadership of New England in the trade.

CONTRABAND TRADE DURING THE FRENCH AND INDIAN WAR

During the years from 1755 to 1763, the period of the struggle between France and Great Britain for supremacy in America, the trade of all the islands of the West Indies suffered more or less. The French sugar planters especially, because of British dominance on the sea, were often in serious difficulties. Nevertheless, plantation supplies continued to be sent out from the continental colonies to both British and French islands. The trade with the French islands was of course contraband, but through various devices it continued to be conducted on a very considerable scale, and by this means French sugar and molasses still found an outlet and the needed supplies were obtained.

Some of this trade with the enemy on the part of the continental colonies was carried on directly under the protection of flags of truce granted by the colonial governors for the ostensible purpose of exchang-

ing prisoners, and in other ways. A very considerable part of the contraband trading, however, was of a more roundabout sort and was effected through the neutral Dutch and Spanish ports. At first the Dutch islands of Curaçao and St. Eustatius were the centers of this trade, but, being broken up in these places by the British fleet, the trade transferred itself to the Spanish port of Monte Christi adjacent to the French settlements on the island of Haiti. Here resorted New England vessels laden with the customary plantation supplies, which they exchanged at very profitable rates for French sugar and molasses in addition to bringing in European goods and taking back part payments in coin (119).

Thus, in spite of difficulties, it was still possible to find an outlet for New England horses, and these continued to be supplied to both French and British planters. This is indicated, for example, by the complaint of Governor Hardy to the Lords of Trade in 1757 to the effect that the New England colonies still continued to send supplies to the enemy. Governor Hardy mentions a privateer "lately come into port which reports having spoke several vessels off Block Island bound for the Indies with horses notwithstanding the general embargo agreed on by the several governors" (120). In 1762 also the British fleet in the Bahamas seized a similar vessel bound for Cayenne with lumber, provisions, and horses (121).

After the conclusion of peace between France and Great Britain in 1763, the commerce between the northern colonies and the British islands went on as before. Between that date and the beginning of the American Revolution, horses were again a considerable item of exchange. In the years 1771 and 1774, according to the record of the Secretary of Customs in London, there were imported into the British islands from "North America" a total of 3647 oxen and 7130 horses (122). The trade with the French islands, however, fell off considerably because of the resurrection of the Molasses Act and the establishment of means for its adequate enforcement, as well as other trade acts that were passed (123).

CHANGES IN THE PRODUCTION OF SUGAR

In addition to the effect of the continued growth of both British and French sugar plantations throughout this period, with the various inter-

ruptions in the trade resulting from wars, acts of Parliament, and other causes, there remained still another factor that affected the demand for horses. This was a change in the methods of manufacture of sugar, which took place in connection with a shift in the center of production from the small islands, such as Barbados, Antigua, and Guadeloupe, to the larger ones such as Jamaica and Haiti.

The advantages of the larger islands for the production of sugar were numerous, and they early became apparent to both the British and the French. In both Jamaica and Santo Domingo there were extensive savannas where pasturage was abundant, and the planters thus were able to produce in some measure the livestock needed for draft purposes on the plantations as well as some to be used for food; in addition, both islands were well stocked with wild horses and cattle left from the former Spanish occupation; (124) and, further, there was plenty of timber to be found, of a sort which could be used in constructing sugar mills.[7] In Jamaica, at least, sugar could be cured more quickly than in the islands of the Windward group (125). Another factor, probably of more importance than any of the others, was the presence of numerous streams capable of furnishing water power for turning the heavy cylinders of the cane-crushing mills (126). All of these conditions tended to facilitate the production of sugar, and as a result Jamaica and Santo Domingo were enabled to increase their output at a more rapid rate than the small islands could do.

The use of water power for driving the cane mills naturally removed the need for horses and cattle for this task. A similar displacement took place to some extent even in the colonies not possessed of adequate water power. In such colonies resort was had to wind-driven mills, and in Barbados, for example, according to Oldmixon, there were by 1741 forty mills of this type to one of the earlier sort (127). On the whole, however, there probably remained in operation a very considerable number of the older horse and cattle mills, and this, together with the fact that they were still needed to haul supplies and to bring the canes from the field, continued to make horses an important item in the

[7] Jamaica was taken by the English from Spain in 1655, and was found to be so well stocked with horses and cattle that it was at once proposed to supply Barbados and the other British colonies from there. This plan was given up, however, because of the difficulty of sailing from Jamaica to the Windward Islands due to the prevailing winds.

needed supplies for the sugar plantations. Also, in Jamaica and in Santo Domingo, in spite of their own abundance of livestock, numerous instances are recorded of their continued importation throughout the period (128). Lastly, the demand for saddle horses was a continuous and important one in all the sugar colonies and, further, was a demand which grew with the general increase in the wealth of the planters. In short, it would seem that whatever decrease in the demand for horses may have resulted from the shift in the center of sugar production and changes in the method of manufacture, such decrease was fully balanced by the mere aggregate of the demand from the steadily increasing number of the plantations and the extensiveness of their operations.

Throughout the whole period from 1700 to 1775, therefore, there existed in the West Indies a ready market for horses which was taken full advantage of by the New England colonies, following the beginning already made in this sort of trade before 1700. During the later period, however, the trade was not confined to the British islands, as formerly, but had extended to those belonging to the Dutch and the French as well; it was better organized and on a much more extensive scale; and, though interrupted in various ways from time to time, it had come to be an important part of the commerce of New England and remained so until the War of the Revolution.

DEVELOPMENT OF COMMERCIAL HORSE RAISING FROM 1700 TO 1775

The steadily widening market for horses which was opened up during the period from 1700 to 1775 has just been described. It is apparent also, from the evidence given, that New England took full advantage of the opportunity for exporting horses which was thus presented. There now remains to be considered the resulting development which took place in New England itself during this same period, whereby the raising of horses on a commercial scale became an important industry.

For the beginning of this development no exact date can be set, but early efforts along this line before 1700 have already been indicated — as, for example, the plans of John Hull and his associates in the Pettiquamscut Purchase in Rhode Island. Most of the early shipments of horses to Barbados and the other British colonies prior to 1700, how-

ever, were in the nature of a disposal of an already existing surplus of horses. But with the settlement of Rhode Island and Connecticut these regions soon adopted the raising of horses for export as a regular source of income, and their ports at length came to displace those on Massachusetts Bay as leaders in the trade.

Some of the reasons for the development of the industry in the newer regions have already been indicated. The broader and more level lowlands, extensive salt marshes to furnish hay, lagoons and ponds to serve as natural boundaries for the pastures, all combined to give these regions an advantage. To this should be added the fact that much of this abundant marsh and other forage was easily accessible for boats, which could make their way into the numberless small streams and inlets and there be loaded with little difficulty.[8] This was a matter of no small gain when it is remembered how difficult it would have been to transport such a bulky commodity as hay over the rough frontier roads of the period. Forage of some sort was a very necessary part of the cargo of the vessels carrying horses to the Indies, for the horses must be fed in transit, and the hay, even though it was commonly pressed into rough bales (129), was an unwieldly article to handle; while the horses themselves, if necessary, could be driven long distances to the point of embarkation.

The development of horse raising as an industry in Rhode Island and Connecticut went hand in hand with the development of the commerce of these colonies with the sugar islands. Its extent, however, must mainly be inferred from mention of it in the reports of the various governors to the Lords of Trade in London and from such fragmentary records of actual shipments as are available.

EXPORTATIONS FROM RHODE ISLAND PORTS

The Rhode Island ports were the first in the new region to embark in the export trade, and even as early as 1681 horses are mentioned by Governor Sanford as one of the "principall matters of export" (130). In the next twenty years the shipping had increased "sixfold" and horses were being sent to Jamaica, Barbados, Nevis, Antigua, St.

[8] As early as 1749, hay was being shipped from the region by boat to other places in New England which were less well supplied. (Elliot, *Essays upon Field Husbandry*, 2d, p. 21.)

Christopher, Montserrat, and Surinam (131). In 1731 Governor Jenks places them first in importance among the exports of the colony, and states that at that time there were ten or twelve vessels engaged in the West Indies trade (132). Ten years later the number of vessels had grown to one hundred and twenty (133). Douglass also confirms the importance to the Rhode Islanders of horses as an article of commerce (134), while the Reverend James MacSparran, for a long time resident in the colony, tells of the "fine horses which are exported to all parts of English America" (135).

Newport and Providence were the main ports of embarkation, but many horses were shipped on small vessels directly from the farms in the Narragansett country (136), where was found the greatest center of the livestock production. In 1745 Moses Brown, one of the more prominent of the Providence merchants, had eight vessels under his management, "some to Surinam with horses" (137); while the correspondence of one Newport firm indicates that during the years from 1731 to 1773 this firm was shipping horses as a regular part of its cargoes to all the British islands and to Curaçao (138).

EXPORTATIONS FROM CONNECTICUT PORTS

At the outset the horses sent out from Rhode Island came into competition with those that continued to be sent from the Massachusetts Bay region, but before long it was Connecticut that had come to be the chief rival in the trade.[9] The renewed enforcement of the Molasses Act after the close of the war with France in 1763 dealt a hard blow to the commerce of Rhode Island, which had been the chief center for the distillation of rum from the molasses received from the French islands,[10] and with the considerable decline in its trade which followed went a lessening of the exportation of horses from its ports and a partial diversion of the trade to the easily accessible outlet at New London in Connecticut, where such shipments had for some time been well established.

[9] One Newport captain in 1731 quaintly complains to his owners that he has been unable to dispose of his cargo of horses at Antigua because "there was 3 New London men arrived before I landed. They sold there horses for tow pistoles a head which is true." (Massachusetts Historical Society, Collections, 7th ser., vol. 9, no. 69, p. 16.)

[10] The former prohibitive duty of sixpence a gallon was reduced in 1764 to threepence; and the act was finally repealed in 1766 and a tax of only one penny a gallon was imposed instead. But between the war and these duties, Rhode Island commerce suffered heavily.

In addition to those shipped from New London, many Connecticut horses were put directly aboard ship at the towns on the Connecticut river, especially at Windsor, which had a considerable trade with the West Indies (139); and after the middle of the century, considerable numbers were sent out from New Haven. New London, however, was the chief point of embarkation, and many horses, as well as other livestock, were driven in from other colonies to be sent from there to the southern market (140). All the Connecticut vessels were supposed to clear at this port (141), and some of the river vessels undoubtedly took on board their cargoes of horses there (142), although, according to Caulkins, many such vessels "slipped over the bar uncounted" and sailed directly to the Indies (143).

This commerce of the Connecticut coast towns was well known. James Fenimore Cooper, in one of his tales of frontier life written at a date (1832) near enough to the heyday of this trade to have enabled him to get direct testimony as to its extent, puts the following in the mouth of one of his characters: "I have been down at the mouth of both Havens, that . . . named after the capital of Old England, and that which is called Haven with the addition of the word 'New,' and have seen the snows and brigantines collecting their droves like the ark, being outward bound . . . for barter and traffic in four footed animals" (144).

The Connecticut vessels were mainly sloops and schooners, single-decked and without topmasts; and, unlike those of the other colonies, they were engaged almost entirely in the West Indies trade, making two trips a year. In New London, however, there were built some larger square-rigged ships, with more ample deck space designed to facilitate the transportation of large cargoes of livestock. These "horse jockeys," as they were called, have already been mentioned; one of them sailed from New London in 1716 bound for Barbados with forty-five horses on board, and later others were built which could carry even greater numbers (145). In 1724 six of these ships left port together, all freighted with similar cargoes (146), and in 1731 three arrived in Antigua with so many horses as to completely swamp the market (147).

Taken as a whole, the commerce of Connecticut increased very rapidly during this period and continued to increase until the beginning of

the Revolutionary War,[11] and from all the evidence available it is clear that the export trade in horses played no inconsiderable part in this growth. Horses continued to be sent out from Rhode Island and Massachusetts ports, but it was in Connecticut, and especially in New London, that the trade finally came to be mainly centered in the period just before the Revolution.

SOURCES OF SUPPLY FOR THE EXPORT TRADE

Such an extensive exportation of horses from the Connecticut and Rhode Island ports as has just been described indicates the raising of them for this purpose in large numbers and over a very considerable area. Details concerning such horse breeding, however, are very meager. Horses were probably raised to some extent by all the farmers in the region in response to the steady demand that existed.[12] The various cases of horse stealing found in the court records, as already described, as well as the presence of the so-called "horse coursers" who went about the country buying up animals and driving them in herds to the points of shipment, would indicate that this was the case (148).

Here and there throughout the area, however, were certain favorably situated districts where the breeding of horses and of other animals for export was much more specialized. This was the case, for example, on Fisher's Island, just off the mouth of the Thames, which was given over almost entirely to animal husbandry (149). Also, in the Connecticut River Valley the region round about Windsor seems to have been another such center (150). But by far the most extensive and important of these specialized areas was to be found in the Narragansett district of Rhode Island — a region so famed in the annals of the time for its great flocks of sheep, its dairies and cattle, and above all its fine horses, as to have been noted by most of the contemporary writers of the period.

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[11] Between the years 1762 and 1774 the number of Connecticut vessels increased from seventy-six, with a total burden of 6790 tons, to one hundred and eighty, with a total tonnage of 10,317. (Connecticut Archives, Census, p. 5. Cited by Weeden, *Economic and Social History of New England*, vol. 2, p. 758.)

[12] The inventory of John Walworth, of New London, in 1748 shows the arrangement of a well-to-do farmer's estate of that period. He possessed 4 negro servants, 77 ounces of silver plate, 50 head of cattle, 812 sheep, and 32 horses, mares, and colts (Caulkins, *History of New London*, p. 345).

THE NARRAGANSETT PLANTERS AND THEIR HORSES

Strictly speaking, the Narragansett country embraced all the lands occupied by the Narraganset Indians at the coming of the English; but in the parlance of the time the term came to be applied to a part of this territory consisting of a strip of land about twenty miles long and from two to four miles wide. This extended along the western shore of Narragansett Bay, from Wickford on the north to Point Judith on the south, and thence westward along the coast to include the Champlain tract in Charlestown. It was on this fertile, well-watered plain that there was developed a region of large and pretentious estates — the homes of the Narragansett planters, so called — and here was found a type of agriculture and a social order unlike anything to be found elsewhere in New England.

Channing, who has had access to the local town records of the area and to various manuscripts and family papers, describes these Narragansett planters as follows (151):

> Unlike the other New England aristocrats of their time these people derived their wealth from the soil and not from success in mercantile adventures. They formed a landed aristocracy which had all the peculiarities of a landed aristocracy to as great an extent as did that of the southern colonies. Nevertheless these Narragansett magnates were not planters in the usual and commonly accepted meaning of the word. It is true enough that they lived on large isolated farms surrounded by all the pomp and apparent prosperity that a horde of slaves could supply. But if one looks beneath the surface, he will find that the routine of their daily lives was entirely unlike that of the Virginia planters. The Narragansett's wealth was derived not so much from the cultivation of any great staple like cotton or tobacco, as from the product of their dairies, their flocks of sheep, and their droves of splendid horses, the once famous Narragansett pacers. In fine they were large — large for the place and epoch — stock farmers and dairymen.

This region was from the outset one of large-scale agricultural operations. Roger Williams had penetrated the area some time before 1650, and in 1641 Richard Smith had bought a tract of 30,000 acres from the Narraganset sachems and had erected a house (152); but the real settlement of the area did not proceed at a rapid rate until after the Pettiquamscut Purchase (153), made in 1657 by John Hull (of pine-tree shilling fame) and a number of associates, and the Atherton Purchase (154), made two years later by a company headed by Sir Humphrey Atherton and John Winthrop, of Connecticut. Both these groups of owners bent their efforts to obtaining settlers for their holdings. Evidently, because of the many natural advantages of the sec-

tion, they had little difficulty in achieving this result, for in 1670 a letter from Major Mason to the Commissioners of the Colony of Connecticut stated that the land was at that time mainly taken up with farms, some of which were five, six, and even ten miles square (155). John Hull's plan in 1677 for horse breeding on a large scale to get "large and fair horses and mares" for the West Indies trade is noted elsewhere and is another evidence of these large-scale operations. Hull's scheme was a rather ambitious one. He planned to build a stone wall across Point Judith Neck, which would have inclosed a peninsula approximately five miles long and having an average width of about a mile. The object of the wall was to keep out mongrels and strays so that the planters would thus be able to breed up a stock of horses of superior characteristics for shipment to the Indies. Hull goes even further and suggests to his partners, "We might have a vessel made for that service, accommodated on purpose to carry off horses to advantage" (156).

The wealth of the district increased steadily up to the time of the Revolution, and full use was made of the opportunities for animal husbandry of an extensive sort. In 1755 Douglass notes that for New England, "the most considerable farms are in the Narragansett country," and that the largest of these "milks 110 cows, cuts about 200 load of hay, makes about 13,000 weight of cheese besides butter, and sells off considerably of calves, fatted bullocks, and horses" (157). In 1747 South Kingston, the center of the Narragansett region, was assessed for the public colony rate a sum only a little less than that for Providence and about half that for Newport (158); in 1780 it had become by far the richest town in Rhode Island, paying double the sum assigned to Newport and two-thirds more than Providence (159). Most of this wealth was apparently derived from agricultural operations.

Their cattle and the output of their dairies were an important source of revenue to the Narragansett planters. But by far the most noted product of the region — at least toward the middle of the eighteenth century — was a breed of saddle horses which they developed.[13] These

[13] The preference for pacers appeared at an early date and obviously is the cause of the development of the Narragansetts themselves through selection and breeding. Thus Waite Winthrop writes from Boston in 1684 concerning some horses consigned to him for sale: "I am offered £30 but if the two paced well they would bring nearer £50, for such is difference from ordinary jades if they do but pace well." (Winthrop Papers; Massachusetts Historical Society, Collections, 5th ser., vol. 3, p. 446.)

were the famous Narragansett pacers, whose praises were sung by all the contemporary writers of the period and tales of whose remarkable performances still linger as part of our American horse lore.

The best description of these unusual pacing horses is given in an article on American agriculture in the first American edition of the Edinburgh Encyclopedia (160), written about 1830 by Robert Livingston. The description reads as follows:

> They have handsome foreheads, the head clean, the neck long, the arms and legs thin and taper; the hindquarters are narrow and the hocks a little crooked, which is here called sickle hocked, which turns the hind feet out a little: their color is generally, though not always, bright sorrel; they are very spirited and carry both head and tail high. But what is most remarkable is that they amble with more speed than most horses trot, so that it is difficult to put some of them upon a gallop. Notwithstanding this facility of ambling, where the ground requires it, as when the roads are rough and stony, they have a fine easy single footed trot. These circumstances, together with their being very sure footed, render them the finest saddle horses in the world: they neither fatigue themselves nor their rider. It is generally to be lamented that this invaluable breed of horses is now almost lost by being mixed with those imported from England and from other parts of the United States.

The sturdy qualities of the Narragansett pacers have been perpetuated also by James Fenimore Cooper in his tales of the American wilderness. The horses were evidently still obtainable in Cooper's day (161) and he must have been an admirer of the breed, for he brings them into his stories frequently. They are described by Cooper as being small, sorrel in color, and distinguished by their easy pacing gait and great endurance.

As to the origin of these pacers — the first distinctly American breed of horses — there have been many stories current at one time or another, most of which tales are obviously fanciful. One of the most plausible accounts is a tradition handed down in the Hazard family, of Rhode Island, the early members of which were among the more important breeders of the animals. According to this story the progenitor of the breed was imported from Andalusia, in Spain, by Deputy Governor Robinson (162), whose estate the Hazards inherited.

Wallace (163), a modern writer who has given some attention to the various stories regarding the origin of the Narragansetts, contends that they resulted solely from careful selection and breeding of the common New England stock. He refuses to give credence to the story

of an admixture of Spanish blood, first, "because there were no pacers in Andalusia or any other part of Spain," and secondly, because "the Narragansetts were a leading article of export from Rhode Island in 1680, thirteen years before Governor Robinson was born." Both these objections made by Wallace are of doubtful validity, however. There is available no such complete information regarding the horses in Spain during the period in question as to justify any such sweeping assertion as to the entire absence of pacers. And, although it is true that horses were reported by Governor Sanford to the Lords of Trade in London in 1680 as an important article of export from Rhode Island, there is nothing to indicate that these horses were of the Narragansett breed. The presumption is that they were not, for the Narragansett district proper was not really settled until about that date. Furthermore, Captain John Hull in 1677 looked on his plan (noted on page 905 for breeding a race of "large and fair horses and mares" as a new venture for the region. In short, the horses mentioned by Governor Sanford were in all probability raised in the northern and eastern parts of Rhode Island, where the country was already in farms before the Narragansett district was settled.

It would seem, therefore, that the tradition concerning the importation of Spanish stock by Deputy Governor Robinson deserves some credence. Whether or not there were any pacers in Spain at the time is immaterial, for it is shown by the correspondence of Governor Winthrop and other writers that pacers were not uncommon in New England as early, at least, as 1684 (164), and the pacing gait of the Narragansetts may very easily be accounted for on the basis of selection and breeding of this native stock. Such selection may have gone on for a greater or less period before the importation of a stallion from Spain to still further improve the breed. Such importation, in fact, is just what might have been expected to happen as attention was increasingly directed to developing an improved strain.

The pacing gait was one of the most characteristic points of the Narragansetts. It is said that the pure-bloods could not trot at all. The gait itself is described as being peculiar in that the backbone of the horse moved through the air in a straight line, thus differing from

that of the common "racker," or pacer of the present day, and from horses having an acquired pacing gait (165). A breed in which the pacing habit was so firmly established must have had back of it an ancestry in which such movement had long been the usual gait. As already indicated (page 894), such a breed is to be found in the Irish hobbies, which were so greatly sought after as saddle horses in England during the early part of the seventeenth century mainly because their pacing gait was easier than that of any other horses of the period. Such fragmentary descriptions of these hobbies as are available (166) disclose a striking similarity in appearance to the Narragansett pacers. These Irish ponies were small, spirited, possessed of unusual endurance, and commonly sorrel in color — all of which characteristics are similarly to be found in the Narragansetts. Although no direct proof can be adduced in support of such a view, it would seem to be at least a plausible theory that the Narragansett pacers resulted from the selection and breeding of some of these Irish hobbies which had been brought to New England at an early date. Later, as indicated by the tradition in the Hazard family, these may have been crossed with some imported Spanish stock to build up the breed still further.

As to the speed and stamina of the Narragansetts and the unusual ease of their gait for saddle purposes, there is much evidence. Pacing races were often held at Little-Neck Beach at South Kingston, and some of the silver tankards won at these races are said by Updike, writing in 1847, to have been still in the possession of some of the old Narragansett families at that time (167). The Reverend James MacSparran, sent out to Rhode Island in 1721 by the Society for the Propagation of the Gospel in Foreign Parts and for many years a resident in the colony, records that he has seen some of these horses pace a mile "in a little more than two minutes and a good deal less than three," and adds further that he has often ridden them "fifty; nay, sixty miles in a day even here in New England where roads are rough, stony and uneven" (168). Another contemporary writer describes "the natural pacers of horses which at a cow run — a gait which they acquire by pasturing when colts with the cows [truly a surprising theory!] — will pace three miles in seven minutes."

Further evidence of the unusual ease of the saddle gait of the

Narragansetts is given in a letter written about 1847 and quoted by Updike (169) in his *History of the Episcopal Church in Narragansett.* This describes how in 1791 an aged lady then living in Narragansett rode one of these pacers on a lady's side-saddle to Plainfield, a distance of thirty miles, rode the next day to Hartford, forty miles, staid in Hartford for two days, then rode forty miles to New Haven, then forty miles to New London, and then home to Narragansett, forty miles more. The lady claimed to have experienced no sensible fatigue.

Because of the export trade with the West Indies, horses of any sort would have been a valuable source of revenue to the Narragansett planters,[14] and it is probable that many of the ordinary New England stock were bred for this purpose in the region. But the cream of the demand from the sugar planters was for saddle horses for personal use, and for these they were willing and able to pay extravagant prices. To this demand was added that of persons of means throughout all New England and the other continental British colonies as well.[15] Thus, in these unusual pacers, whose gait and general characteristics suited them so admirably to such use, it is clear that the Narragansett district had a very important source of revenue and one which probably contributed in no small measure to its prosperity.

The horses and other livestock of the Narragansett district designed for exportation to the West Indies found an outlet through the various ports on Narragansett Bay, or were driven to New London or Stonington over the old Pequot trail, which had become the post road between Boston and New York and which passed through the center of the region. Apparently many animals were shipped also directly from the Narragansett country itself; Robert Hazard, for example, is said to

[14] From the account book kept by Thomas Hazard, one of the wealthiest and most prominent of the Narragansett planters, may be gleaned some idea of the prices received. In 1753 he sold a three-year-old at £150, and the next year a thirteen-year-old bay "with a white nose" brought £70; while in 1755 a "black troting mare" brought only £55. In 1763 a black mare sold for £244, but by that time the Rhode Island currency had greatly depreciated in value and Mr. Hazard noted alongside that £7=1 Spanish Milled Dollar." In 1766, however, one "dark colored natural pacing horse with some white on his face" brought the high price of fifty-five Spanish milled dollars. (Hazard, *Thomas Hazard, Son of Robt., call'd College Tom*, p. 63.)

[15] Watson (*Annals of Philadelphia and Pennsylvania*, p. 209) gives an account of one such shipment in 1711, as recorded in a letter written by a certain Rip van Dam who had engineered the transaction on behalf of Jonathan Dickinson, of Philadelphia. The horse was shipped from Rhode Island in a sloop, from which he jumped overboard and swam ashore to his former home. Recaptured, he finally arrived in New York, "after fourteen days passage much reduced in flesh and spirit." He cost £30 plus 50 shillings for freight, and was evidently an animal of spirit; he "would not stand still but plays about all the time;" he would "drink a glass of wine or beer or cider," and Rip van Dam further opines that "he would drink a dram on a good cold morning."

have raised about two hundred horses annually and to have loaded two vessels a year with them and other produce of his farm. These vessels sailed "from the South Ferry directly to the Indies where the horses were in great demand" (170). It was the Hazard family[16] which seemed to have been mainly concerned in the early development of the Narragensett pacers, and it is probable that many of the horses thus shipped were of the famous breed.

To recapitulate, then, it may be said that during this period from 1700 to 1775, in response to the demand from the West Indies sugar plantations for draft animals and from the same source and from all the continental colonies for saddle purposes, the breeding of horses finally became, in the period just preceding the Revolution, a widespread industry throughout all Rhode Island and Connecticut — and probably in the other New England colonies as well — and that in some particularly favored spots it was carried on in a highly specialized and extensive fashion. The "horse jockeys" with their large cargoes, the numberless small vessels carrying only a few animals on their scanty decks, the famous pacers driven overland to neighboring continental colonies, all must have contributed a very considerable item of revenue to the New England region and aided the colonists in that search for "a good return" on which they were always bent.

DECLINE IN HORSE RAISING AFTER THE REVOLUTION

The exportation of horses, which was interrupted during the Revolution as was the other commerce of the colonies, was revived at the close of the war. Now, however, the New England vessels were denied entrance to the British sugar islands by the decree restricting trade to British bottoms, so that a considerable proportion of the former outlet for horses no longer existed. Such shipments as were made went mainly to the French islands and to Cuba, which by that time had been thrown open to trade by the Spaniards and was developing rapidly as a producer of sugar.

This revival of the horse trade seems to have had its main focus in New London. The "horse jockeys" were once more embarked on their former service; one brig took out forty-nine horses, and many sloops

[16] The Robert Hazard mentioned above was born in 1689 and died in 1762.

carried as many as thirty-five in a single cargo. The *Enterprise,* bound for Demerara, carried provisions, brick, lumber, twenty horses, seventeen neat cattle, and seventeen mules, besides swine, geese, and turkeys (171). The general extent of these shipments is shown in a marine list kept by Thomas Alden in the *New London Gazette.* According to this record there was sent out from New London during the year 1785 a total of 8094 horses and cattle; and in the years following, the numbers were, successively, 6671, 6366, and 6678 — the record ceasing with the year 1788 (172).

This revival of horse exporting apparently was not especially successful and did not continue long,[17] for the New London vessel owners were soon casting about for some better occupation for their ships. On the return of two of these ships from an expedition to the Gulf of St. Lawrence with profitable cargoes of whale oil, the *New London Gazette* exhorts, in rather mixed metaphor, " Now my horse jockeys, beat your horses and cattle into spears, lances, harpoons and whaling gear, and let us strike out " (173).

The reopening of the British West Indies ports to New England vessels in 1789 (174) apparently failed to halt the decline that had begun in the New England horse trade, if one is to judge by the infrequency with which this trade is now mentioned. It is probable that in the general interruption of the trade during the Revolution, the sugar islands, thrown on their own resources, had learned to furnish their own supply (175). As already indicated, the larger islands of Jamaica and Haiti were plentifully supplied with pasturage and wild horses, by means of which this could be accomplished. Nor was Cuba as promising a market as might have been expected, for it possessed similar advantages. In addition, the substitution of water power for the mills probably continued to take place in all the islands where it was possible. Lastly, there are indications that the pasturage available in New England itself was not so ample as formerly and was being

[17] An indication of the general decline in the exportation of horses which occurred after the Revolution is found in the following table reproduced from Pitkin (*A Statistical View of the Commerce of the United States of America*, p. 62–63). These figures include shipments from other ports besides those in New England.

Year	1791	1792	1793	1794	1795	1796	1797	1798
Number of horses exported from the United States..	6,975	5,656	3,728	3,495	2,626	4,583	1,177	2,132

gradually infringed on by the cultivation of new land; in fact, according to Elliot (176) this scarcity of pasture land and meadows, with the resultant high price of hay, had begun to be felt even before the Revolution. All these things combined to make difficult the resumption of the trade in horses on its former scale.

Just what became of the large number of animals which had for so long furnished a steady article of commerce is not very clear. The very considerable shipments to the French islands, already noted, which immediately followed the close of the Revolution, probably accounted for such surplus of the ordinary stock as had accumulated; while the demand for saddle horses on the part of the increasingly prosperous Spanish planters of Cuba probably took many of the Narragansett pacers (177). Then, too, the mere cessation of breeding new colts, as the demand for export purposes lessened, would have had an immediate effect on the numbers. But most important of all, doubtless, was the breaking up of former pastures for the purpose of cultivating field crops to supply the demand of Europe for provisions during the war between France and England which began in 1793 and which soon forced prices for such supplies to a high level. The effect of such a change in agriculture would be, on the one hand, to cut down the number of horses that could be cheaply raised, and, on the other, to give ample opportunity for the employment in the new operations of the horses already available. Finally, as the people from New England pushed westward to the settlement of newer lands in New York and elsewhere, they also probably drew off considerable numbers from the existing supply.

Another event indicating the changed conditions in horse raising as a New England industry during this period following the Revolution, was the disappearance of the Narragansett pacers. This breed, so carefully developed and so noted in the annals of the time, at length became extinct and is known at present only as a sort of legendary strain whose connection with other American breeds, if any connection exists, is mainly a matter of conjecture.

The demand for the Narragansetts from the wealthy planters of Cuba, when that island at length began to cultivate sugar extensively, has been assigned by one writer (I. P. Hazard) as the chief cause for the disappearance of the breed. He says in part: "The planters became suddenly rich and wanted pacing horses . . . to ride, faster than

we could supply them, and sent an agent to this country to purchase them on such terms as he could . . . He commenced buying and shipping till all the good ones were sent off" (178).

It is easy to understand that such a large and unexpected demand from Cuba, without restriction as to price, might deplete the breed very seriously. But if the Narragansett planters did thus actually kill the goose that laid the golden eggs by shipping off all their breeding stock, it must be that there were other factors at work which made them willing to sell. It might indicate, for example, that their experience in attempting to sell in their former markets after the war, had convinced them that the end of the earlier export trade was in sight.

There are, however, other obvious reasons which probably contributed to the dispersal of the sturdy little pacers which had so long been a profitable commodity. They were not beautiful at best; they were small, scarcely more than fourteen hands high, and their gait, while desirable for saddle purposes, did not fit them for driving to advantage in team or harness (179). All these things undoubtedly worked against the Narragansetts as the roads in the colonies became better, wheeled vehicles came into use, and there was need for larger and heavier animals for harness and draft. The pacers were, in short, of most value under frontier conditions, and as the region along the coast became more settled there is evidence that they were actually dispersed to remoter regions, especially to Canada, Kentucky, and Tennessee. It is in these places that the pacing blood seems to have been preserved in the midst of the influx of English thoroughbred stock beginning about 1750 (180).

Thus closed the final chapter in New England's leadership in the exportation of at least one product of an agricultural nature — a leadership which had been held undisputed for more than a century; which in the lean years of her early commerce had eked out to good purpose the exchanges of New England with the West Indies and by which she was enabled in turn to purchase English goods; which had aided in the opening and settlement of her lands remote from the coasts and harbors; and which finally had a part in the development in the Narragansett district of a social and economic organization based on agriculture, which was comparable to any other found in continental America during the colonial period.

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86. Some contemporary opinions regarding the special advantages of these regions are to be found in the following references: Calendar of State Papers, Col. Ser., 1661–1668, p. 343; same reference, 1675–1676, p. 221; Description of Rhode Island by Daniel Neal (cited by Field, State of Rhode Island at the End of the Century, p. 565).
87. Rhode Island Col. Records, vol. 1, p. 337.
88. Hull, Diaries (Amer. Antiquarian Soc., Collections, vol. 3, p. 127).
89. Same reference.
90. Quoted from original in British State Papers Office, N. Eng. Papers, B. T., vol. 3, no. 121, by Arnold, History of Rhode Island, vol. 1, p. 488. (The copy given in Calendar of State Papers, Col. Ser., 1677–1680, p. 524, is apparently incomplete.)
91. Calendar of State Papers, Col. Ser., 1677–1680, p. 577.
92. Caulkins, New London, p. 236.
93. Rhode Island Col. Records, vol. 1, p. 150.
94. Connecticut Col. Records, vol. 2, p. 28.
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96. Rhode Island Col. Records, vol. 1, p. 337.
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112. Letter from Governor Robert Lowther to the Board of Trade, October 25, 1715. Colonial Office Papers 28:15 — T 101 (quoted by Pitman, Development of British West Indies, p. 202).
113. Anderson, Origin of Commerce, vol. 2, p. 335–338.
114. This part of the memoir follows the general account of the effects and enforcement of the Molasses Act as given by Beer, British Colonial Policy, chapter 3, and chapter 9, p. 230–231.
115. New England Papers, B. T., vol. 3, p. 121, in British State Papers Office (quoted by Arnold, History of Rhode Island, vol. 1, p. 488). Rhode Island Col. Records, vol. 4, p. 60. Report of Governor Jenks to the Lords of Trade in 1731 (cited by Arnold, History of Rhode Island, vol. 2, p. 106).
116. The general importance of the export trade of New England in horses is emphasized by the following writers: Hall, Importance of the British Plantations in America, p. 104; Bennett, Letters and Calculations on the Sugar Colonies and Trade, letter 4, p. 5; Little, State of Trade in the Northern Colonies, p. 35; Savary Desbrulons, Dictionary of Trade and Commerce, vol. 1, p. 344, 367; Ashley, British Colonies in America, vol. 2, p. 99.
117. A summary of this controversy is given in Anderson, Origin of Commerce, vol. 2, p. 335–338.
118. New York Docs. Relative to Col. Hist., vol. 5, p. 556, and vol. 6, p. 127, 393.
119. An account of this contraband trade and the measures adopted to check it is given in Beer, British Colonial Policy, chapters 6 and 7.

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